

# NUCLEAR REGULATORY COMMISSION WEATHER PROGRAMS

The United States Nuclear Regulatory Commission (NRC) licenses and regulates all nuclear facilities subject to the Atomic Energy Act of 1954 as amended. The licensing and operation of these nuclear facilities require the identification of meteorological and climatological conditions that can affect the safe operation of the facility, and that provide input to the assessment of the radiological impacts of any airborne releases from the facility.

Within the NRC, the Office of Nuclear Reactor Regulation and the Office of Nuclear Material Safety and Safeguards conducts reviews of facility siting, design, construction and operation of nuclear facilities as well as conducting rulemaking to establish regulatory requirements. These reviews include consideration of meteorological factors. The NRC Regional Offices assure that commitments by NRC licensees are carried out and, with NRC Incident Response Operations, also conduct NRC responses to nuclear facility emergencies. The Office of Nuclear Regulatory Research conducts research activities to identify potential safety issues and to provide the technical basis to address these issues and to prepare the agency to regulate the use of new technology. The Office of Research also develops regulatory guidance and participates in the devel-

opment of criteria and consensus standards related to the protection of the public health and safety and the environment.

The primary meteorological area in which the NRC will have an interest during FY 2001 and beyond is



Figure 3-NRC-1. NRC is responsible for licensing activities for a potential high level waste repository located at Yucca Mountain, Nevada.  
(Source: NRC Website)

improvements in the meteorological capabilities of the NRC and the operators of nuclear facilities to cope with emergencies involving the unplanned releases of radioactive materials. In addition, meteorological data will be used to provide input to the assessment of the radiological impacts of routine airborne releases from facilities and the assessment of the potential radiological impacts of engineering changes in plant design or operation proposed by licensees should unplanned releases occur. Also, this information is important to assess the climatological impacts on the isolation of long-lived wastes. The NRC also maintains an interest in the transport and dispersion of airborne, hazardous non-radioactive materials and extreme and severe meteorological events and their potential effects on the safe operation of nuclear facilities.